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| 09/874,126 | 06/06/2001 | Sung-Yao Chang | BHT-3111-177 | 7885 |

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| EXAMINER | |
|---|---|
| MEUCCI, MICHAEL D | |
| ART UNIT | PAPER NUMBER |
| 2142 | |

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/874,126 | CHANG ET AL. | |
| | Examiner | Art Unit | |
| | Michael D. Meucci | 2142 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *12 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *19-21,23-31 and 33-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-21,23-31 and 33-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. This action is in response to the Request for Continued Examination (RCE) filed 12 April 2006.

### *Drawings*

2. The drawings were received on 12 April 2006. These drawings are acceptable. As such, the objection to the drawings has been withdrawn.

### *Response to Amendment*

3. Examiner acknowledges the cancellation of claims 22 and 32.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19, 21, 23, 25-26, 28-29, 34, and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Blinn et al. (U.S. 5,897,622) hereinafter referred to as Blinn, in view of Gaus et al. (U.S. 6,343,277 B1) hereinafter referred to as Gaus.

a. As per claim 19, Blinn teaches: A data active on-demand-transmission system, a personal digital assistant receiving catalogue data, the catalogue data being provided by a data server and being integrated by a system server, the catalogue data

being received and displayed by a personal digital assistant wherein at the customer receiving end; wherein the system server receives and integrates the catalogue data from the system server (lines 26-44 of column 6); then the transmission interface transfers catalogue data to the customer receiving end (lines 52-56 of column 6 and lines 48-55 of column 10); the personal digital assistant receiving end receiving the catalogue data actively transferred via an active wireless transmission from the transmission interface utilizing a one-to-many mode (lines 26-56 of column 6 and lines 48-55 of column 10); after the catalogue is selected and assured by the customer, then the selection is transferred back to the system server from the personal digital assistant (PDA – lines 19-20 of column 6) to inform the system server to analysis and process the signal, processed data is transferred to the data server (line 25 of column 13 through line 14 of column 14 and Fig. 5).

Blinn does not explicitly teach: an application specific integrated circuit (ASIC) is utilized by the personal digital assistant; the application specific integrated circuit provides a verification signal for the selection via a second transmission interface utilizing a one-to-one mode, the second transmission interface being configured to secure data transmitted by the second transmission interface. However, Gaus discloses: "Users 76, 78, and 80 can access the host network 32 via the Internet through Internet service providers 82, 84, and 86. The users 76, 78, and 80 may access the network 32 using any type of computer suitable such as, for example, an IBM compatible PC, an Apple Macintosh, a workstation, a personal decision aid (PDA), or an application specific integrated circuit (ASIC)," (lines 35-42 of column 6); and "Following

the execution of the contract, a confirmation may be sent to the agent and the supplier automatically. The confirmation can be digitally signed before sending so that the receivers will be able to verify the authenticity of the confirmation," (lines 49-53 of column 7). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have an application specific integrated circuit (ASIC) utilized by the personal digital assistant; the application specific integrated circuit provides a verification signal for the selection via a second transmission interface utilizing a one-to-one mode, the second transmission interface being configured to secure data transmitted by the second transmission interface. "The users 76, 78, and 80 are connected to the internet service providers 82, 84, and 86 via communication links 88, 90, and 92 which can be any type of communication link suitable such as, for example, conventional telephone lines. The users 76, 78, and 80 may be any party that is authorized to access the network 32 such as a client, an agent, a buyer, or a supplier," (lines 42-48 of column 6 in Gaus). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have an application specific integrated circuit (ASIC) utilized by the personal digital assistant; the application specific integrated circuit provides a verification signal for the selection via a second transmission interface utilizing a one-to-one mode, the second transmission interface being configured to secure data transmitted by the second transmission interface in the system as taught by Blinn.

b. As per claim 21, Blinn teaches: the personal digital assistant of the customer receiving end is connected to an input/output port of a network through a

cable, the data is transferred through communication module of Internet (lines 49-63 of column 5).

c. As per claim 23, Blinn teaches: date input: the data server outputting catalogue data, and the system server serving to input data (lines 52-56 of column 6); data arrangement: the catalogue data being put in order and classified for expanding the catalogue contents of the data catalogue (lines 53-67 of column 7); system integration: an stacking work for transmission data being performed and then the data being transferred to the transmission interface; transmission: the data being transferred through a transmission channel; and a customer receiving the data (lines 26-46 of column 6).

d. As per claim 25, Blinn teaches: a communication system serves to perform a transmission operation end (lines 52-56 of column 6 and lines 48-55 of column 10);

e. As per claim 26, Blinn teaches: displaying product catalogue: the display screen of the personal digital assistant of the customer receiving end displays the data catalogue processed by the system server (lines 36-46 of column 6); order selection: a selection operation being performed through a selection way provided by the personal digital assistant; if the selection work being not be preformed, the system server actively transfers data catalogue by a proper transmission interface (lines 47-60 of column 6); transmission of ordering data: after the customer accomplishes the selection operation for ordering, then the signal being outputted to a personal digital assistant (line 52 of column 6 through line 4 of column 7); verification operation: the system server verifies

the transferred order data, if the data is wrong, then the order selection operation being performed again, and order verification: assure that the order being correct, and the overall operation being complete (line 53 of column 8 through line 4 of column 10).

f. As per claim 28, Blinn teaches: a wireless personal digital assistant serving to receive a data catalogue from the system server; the data catalogue being displayed by the wireless personal digital assistant; then a selection operation being performed, and a correspondent signal being transferred back to the system server; characteristic in that: transmission of the data catalogue from the system server is actively transferred through a transmission interface; a selection operation is performed in the customer receiving end; and then an operation correspondent to the selection is performed, (line 26 of column 6 through line 41 of column 7).

g. As per claim 29, Blinn teaches: the data catalogue of the system server is provided by a system server, the system server performs a required data processing (line 26 of column 6 through line 41 of column 7).

h. As per claim 34, Blinn teaches: displaying product catalogue: the display screen of the personal digital assistant of the customer receiving end displays the data catalogue processed by the system server (lines 36-46 of column 6); order selection: a selection operation being performed through a selection way provided by the personal digital assistant; if the selection work being not be preformed, the system server actively transfers data catalogue by a proper transmission interface (lines 47-60 of column 6); transmission of ordering data: after the customer accomplishes the selection operation for ordering, then the signal being outputted to a personal digital assistant (line 52 of

column 6 through line 4 of column 7); verification operation: the system server verifies the transferred order data, if the data is wrong, then the order selection operation being performed again, and order verification: assure that the order being correct, and the overall operation being complete (line 53 of column 8 through line 4 of column 10).

Blinn does not explicitly teach: an application specific integrated circuit being installed in an application specific integrated circuit in the personal digital assistant', and the application specific integrated circuit serving to couple signals as the customer selection is outputted. However, Gaus discloses: "Users 76, 78, and 80 can access the host network 32 via the Internet through Internet service providers 82, 84, and 86. The users 76, 78, and 80 may access the network 32 using any type of computer suitable such as, for example, an IBM compatible PC, an Apple Macintosh, a workstation, a personal decision aid (PDA), or an application specific integrated circuit (ASIC)," (lines 36-42 of column 6).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have an application specific integrated circuit installed in an application specific integrated circuit in the personal digital assistant; and the application specific integrated circuit serving to couple signals as the customer selection is outputted. "The users 76, 78, and 80 are connected to the internet service providers 82, 84, and 86 via communication links 88, 90, and 92 which can be any type of communication link suitable such as, for example, conventional telephone lines. The users 76, 78, and 80 may be any party that is authorized to access the network 32 such as a client, an agent, a buyer, or a supplier," (lines 42-48 of column 6 in Gaus). It is for

this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have an application specific integrated circuit installed in an application specific integrated circuit in the personal digital assistant; and the application specific integrated circuit serving to couple signals as the customer selection is outputted in the system as taught by Blinn.

i. As per claim 36, Blinn teaches: displaying product catalogue: the display screen of the personal digital assistant of the customer receiving end displays the data catalogue processed by the system server (lines 36-46 of column 6); order selection: a selection operation being performed through a selection way provided by the personal digital assistant; if the selection work being not be preformed, the system server actively transfers data catalogue by a proper transmission interface (lines 47-60 of column 6); transmission of ordering data: after the customer accomplishes the selection operation for ordering, then the signal being outputted to a personal digital assistant (line 52 of column 6 through line 4 of column 7); verification operation: the system server verifies the transferred order data, if the data is wrong, then the order selection operation being performed again, and order verification: assure that the order being correct, and the overall operation being complete (line 53 of column 8 through line 4 of column 10).

6. Claims 20, 30, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Blinn and Gaus as applied to claims 19, 28, and 20 respectively above, in view of Robinson et al. (U.S. 5,941,648) hereinafter referred to as Robinson.

a. As per claims 20 and 30, Blinn does not explicitly teach: the personal digital assistant includes: a display screen displaying data catalogue a direction selection unit having a left key, a right key, an up key, and a down key for controlling a movement of a cursor; an input key for selection of items; a sensor pen; by directly touching the items on the display screen a respective operation is performed. However, Robinson discloses: "The front surface 4 comprises a touch sensitive screen 14 for inputting and displaying stored data. The front surface may have any number of control buttons 16 for controlling the display as well as variable contrast controller 17. Data may also be entered into storage by touching the screen with a pen or stylus 18 which may conveniently be stored in an opening in the right side of the housing," (lines 41-47 of column 3 and Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the personal digital assistant include: a display screen displaying data catalogue a direction selection unit having a left key, a right key, an up key, and a down key for controlling a movement of a cursor; an input key for selection of items; a sensor pen; by directly touching the items on the display screen a respective operation is performed. Blinn discloses a PDA (lines 19-20 of column 6) as an alternate embodiment of a client, which would motivate one of ordinary skill in the art at the time of the applicant's invention to include the PDA as disclosed by Robinson including the features of a touch-sensitive screen for displaying and inputting, directional buttons for movement of a cursor, an input key for selection of items, and a sensor pen for touching items on the display screen to perform a respective operation. It is for this reason that

one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the personal digital assistant include: a display screen displaying data catalogue a direction selection unit having a left key, a right key, an up key, and a down key for controlling a movement of a cursor; an input key for selection of items; a sensor pen; by directly touching the items on the display screen a respective operation is performed in the system as taught by Blinn.

b. As per claim 35, Blinn teaches: the personal digital assistant of the customer receiving end is connected to an input/output port of a network through a cable, the data is transferred through communication module of Internet (lines 49-63 of column 5).

7. Claims 24 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Blinn and Gaus as applied to claims 23 and 19 above, in view of Chebil et al. (U.S. 6,760,481 B1) hereinafter referred to as Chebil.

a. As per claim 24, Blinn teaches: the system server classifying the catalogue; and the system construction being arranged in order (line 18 of column 10 through line 6 of column 12). Blinn does not explicitly teach: trellis classifying structure. However, Chebil discloses: "It is also prior known to use a so-called Wavelet Trellis Coded Quantization. This algorithm consists of four phases: A wavelet transform of the image data, a classification and bit allocation of the bands of the transformed data, the classification being obtained by computing statistics of the data. Based on the

classifications, quantization of the transform coefficients is performed in trellis fashion," (lines 21-27 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use a trellis file structure to classify the data. "Trellis quantization is adopted from a technique known as trellis modulation which enables use of twice the number of quantization levels allowed at a certain bit rate with constraints on the transitions between the levels," (lines 27-31 of column 2 in Chebil). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to use a trellis file structure to classify the data in the system as taught by Blinn.

b. As per claim 33, Blinn teaches: date input: the data server outputting catalogue data, and the system server serving to input data (lines 52-56 of column 6); data arrangement: the catalogue data being put in order and classified for expanding the catalogue contents of the data catalogue (lines 53-67 of column 7); system integration: an stacking work for transmission data being performed and then the data being transferred to the transmission interface; transmission: the data being transferred through a transmission channel; and a customer receiving the data (lines 26-46 of column 6).

Blinn does not explicitly teach a trellis file structure being used to classify the data. However, Chebil discloses: "It is also prior known to use a so-called Wavelet Trellis Coded Quantization. This algorithm consists of four phases: A wavelet transform of the image data, a classification and bit allocation of the bands of the transformed

data, the classification being obtained by computing statistics of the data. Based on the classifications, quantization of the transform coefficients is performed in trellis fashion," (lines 21-27 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use a trellis file structure to classify the data. "Trellis quantization is adopted from a technique known as trellis modulation which enables use of twice the number of quantization levels allowed at a certain bit rate with constraints on the transitions between the levels," (lines 27-31 of column 2 in Chebil). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to use a trellis file structure to classify the data in the system as taught by Blinn.

8. Claim 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Blinn and Gaus as applied to claim 26 above, in view of Lowell et al. (U.S. 6,282,265 B1) hereinafter referred to as Lowell.

Blinn does not explicitly teach: for the transmission of order data, a series number contained in an application specific integrated circuit within the personal digital assistant is used as an verification signal for the verification step. However, Lowell discloses: "Before describing in detail the new and improved two-ended line pair identification system in accordance with the present invention, it should be observed that the invention resides primarily in what are effectively modular arrangements of conventional communication circuits and associated digital signal processing

components and attendant supervisory control circuitry therefor, that controls the operations of such circuits and components. In a practical implementation that facilitates their incorporation into printed circuit cards of telecommunication test equipment, these modular arrangements may be readily configured as field programmable gate array (FPGA)-implementations, application specific integrated circuit (ASIC) chip sets, programmable digital signal processors, or general purpose processors," (lines 2-16 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have, for the transmission of order data, a series number contained in an application specific integrated circuit within the personal digital assistant is used as an verification signal for the verification step. "The (local and remote) ends of the cable distribution system may be terminated in a customary manner by multi-terminal frames, that are configured to be mechanically and electrically interfaced by connector components that allow selective bridging onto any of the tip/ring pairs of the cable plant by various test equipments, such as personal digital assistant (PDA) configured test units, that allow direct interactive control by telecommunication service personnel operating such units or remote control by an associated supervisory communication link. As a non-limiting example, such test equipment may comprise an RVU (records verification unit) manufactured by Harris Corporation," (lines 41-53 of column 3 in Lowell). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have, for the transmission of order data, a series number contained in an application specific integrated circuit within

the personal digital assistant is used as an verification signal for the verification step in the system as taught by Blinn.

9. Claim 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Blinn, Gaus, and Robinson as applied to claim 30 above, in view of Costello.

As per claim 31, Blinn does not explicitly teach: the personal digital assistant selects an object by the sensing pen to move on the display screen. However, Robinson discloses: "The front surface 4 comprises a touch sensitive screen 14 for inputting and displaying stored data. The front surface may have any number of control buttons 16 for controlling the display as well as variable contrast controller 17. Data may also be entered into storage by touching the screen with a pen or stylus 18 which may conveniently be stored in an opening in the right side of the housing," (lines 41-47 of column 3 and Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the personal digital assistant a sensing pen to select and object by directly touching the items on the display screen. Blinn discloses a PDA (lines 19-20 of column 6) as an alternate embodiment of a client, which would motivate one of ordinary skill in the art at the time of the applicant's invention to include the PDA as disclosed by Robinson including the features of a touch-sensitive screen for displaying and inputting, directional buttons for movement of a cursor, an input key for selection of items, and a sensor pen for touching items on the display screen to perform a respective operation. It is for this reason that one of ordinary skill in the art at the time

of the applicant's invention would have been motivated to have the personal digital assistant include: a display screen displaying data catalogue a direction selection unit having a left key, a right key, an up key, and a down key for controlling a movement of a cursor; an input key for selection of items; a sensor pen; by directly touching the items on the display screen a respective operation is performed in the system as taught by Blinn.

***Response to Arguments***

10. Applicant's arguments filed 12 April 2006 have been fully considered but they are not persuasive.

11. (A) Applicant's arguments with respect to claim 19 have been considered but are moot in view of the new ground(s) of rejection.

12. (B) Regarding Blinn not teaching the PDA receiving the catalogue data, the examiner respectfully disagrees. The examiner points to lines 26-46 which very clearly describe a portable shopping device which utilizes a consumer browser which communicates with a network such as the internet to access a merchant's online store using the merchant system. This description clearly teaches a PDA receiving the catalogue data. Additionally, this argument has been previously discussed in the previous office action under "Response to Arguments" section under point (A).

13. (C) Regarding Robinson, Costello, Chebil, Lowell, and Gaus, hereinafter referred to as "the remaining references" not teaching the PDA receiving the catalogue data, this has been taught by Blinn as described in point (B) above.

14. (D) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allibhoy et al. (U.S. 6,980,972 B1) discloses shopping system utilizing a PDA.

Ludtke (U.S. 6,986,463 B2) discloses PDA shopping system.

McCarthy et al. (U.S. 2005/0288954 A1) discloses a personalized web content manager and browser including a virtual shop.

Tarvydas et al. (U.S. 2006/0041485 A1) discloses universal shopping card and order system.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER